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09/113,751	07/10/1998	STEPHEN R. LAWRENCE	11379	8400

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EXAMINER
COLBERT, ELLA

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 04/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _28 January 2002_ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,3-16,18-29,46,48-52,54-57 and 80-89_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,3-16,18-29,46,48-52,54-57 and 80-89_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1, 3-16, 18-46, 48-52, 54-75, 77, 78, and newly added claims 80-89.

Claims 2, 17, 47, 53, and 79 have been canceled, claims 1, 4, 12, 14-16, 19, 26, 28, 29,

46, 49, 52, and 55 have been amended and claims 80-89 are newly added claims in this

communication filed 01/22/02 entered as Reconsideration, paper no. 15 and RCE filed

01/28/02 entered as paper no. 16.

Claim Objections

2.   Claim 84 is objected to because of the following informalities: Claim 84 is a self-

dependent claim. For examination purposes the Examiner will assume that claim 84

depends on claim 83. Claim 85 is objected to because claim 85 recites " (c) ... two

clusters form the previous step, ..." and "(f) ... one context string form a set of

documents." Claim 85 would be better recited as "(c) ... two clusters from the previous

step, ..." and "(f) ... one context string from a set of documents." Appropriate correction

is required.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 16, 46, 52, and 86-89 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Redfern (US 6,078,914) in view of "Text Search and Retrieval

Examiner Training Manual for the Automated Patent System (APS), hereafter referred
to as APS.

With respect to claim 1, Redfern teaches forwarding a query to third party search
engines (col. 2, lines 2-8); receiving and processing in parallel the responses from the
third party search engines, the responses identifying documents in response to the
query (col. 2, lines 37-44 and lines 52-67, col. 3, lines 1-15, col. 8, lines 66-67, col. 9,
lines 1-8, col. 10, lines 25-44, and fig. 1 (32, 36, 38, and 42) the processing including
the steps of: downloading the full text of the documents identified in response to the
query (col. 4, lines 9-21 and figure 1).

Redfern did not teach locating query terms in the documents and extracting text
surrounding the query terms and displaying the text surrounding the query terms.

APS discloses locating query terms in the documents (page 5-2, lines 25-35,
page 8-6 lines 5 & 6 and the screen drawing showing keyword in context (KWIC) and
extracting text surrounding the query terms and displaying the text surrounding the
query terms (page 8-9, line 6 and the drawing of a display screen). KWIC (Key Word In
Context) is defined as displaying the following: Up to 20 terms on either side of the
search term.

With respect to claim 16, this independent claim is rejected for the similar
rationale given for claim 1.

With respect to claim 46, this dependent claim is rejected for the similar rationale
given for claim 1.

With respect to claim 52, this dependent claim is rejected for the similar rationale given for claim 1.

With respect to claim 86, Redfern teaches clustering the documents based on analysis of the full text of each document and identification of co-occurring phrases and words, and conjunctions and displaying the information regarding the documents arranged by clusters (col. 9, lines 44-65, col. 33, lines 14-65, and Appendix J).

This independent claim is also rejected for the similar rationale given for claim 1.

With respect to claim 87, Redfern teaches displaying suggested additional query terms for expanding the query based on terms in the documents identified in response to the query (col. 5, lines 1-4).

This independent claim is also rejected for the similar rationale given for claim 1.

With respect to claim 88, Redfern teaches receiving a query and transforming the query from the form of a question into the form of an answer prior to forwarding the query to the plurality of third party search engines (col. 2, lines 21-27 and col. 15, lines 42-49).

This independent claim is also rejected for the similar rationale given for claim 1.

With respect to claim 89, Redfern teaches displaying an indication of how close the query terms are to each other in the documents (col. 10, lines 64-67 and col. 11, lines 1-10).

This independent claim is also rejected for the similar rationale given for claim 1.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 3-15, 18-29, 48-51, 54-57, and 80-85 rejected under 35 U.S.C. 103(a) as

being unpatentable over Redfern (US 6,078,914).

With respect to claim 3, Redfern teaches filtering the context strings in order to

improve readability by removing redundant whitespace, repeated characters, HTML

comments and tags, and special characters (col. 4, lines 35-67, col. 11, lines 55-67,

and col. 13, lines 15-22). These claim limitations are well known in the art as editing a

search string.

With respect to claim 4, Redfern teaches identifying and displaying a list of

documents identified in response to the query which do not contain any query terms

(col. 16, lines 1-11).

With respect to claim 5, Redfern teaches clustering the documents based on

analysis of the full text of each document and identification of co-occurring phrases and

words, and conjunctions (col. 9, lines 44-65, col. 33, lines 14-65, and Appendix J).

With respect to claim 6, Redfern teaches storing the documents matching a

query so a query can be repeated and only showing documents which are new or have

been modified since the last query or a given time (col. 1, lines 33-45 and col. 10, lines

39-45).

With respect to claim 7, Redfern did not explicitly teach, filtering the actual documents when viewed in full order to (a) highlight the query terms and (b) insert quick jump links so the user can quickly jump to the query term of interest, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate in Redfern filtering the documents when viewed to highlight the query terms and insert the jump links because such a modification would allow the user once the documents are filtered to enter keywords and click on a link to a document to see the highlighted keyword or keywords and the user can jump links to move back and forth from link to link to documents of interest, therefore, by using a jump link, this is a more efficient method of navigating from document to document and link to link.

With respect to claim 8, Redfern did not explicitly teach, creating and using a database of meta-information regarding query terms, storing a list of movie titles, recognizing when the user enters a query containing a movie title, and taking special action such as referring the user to the review of the movie at a specific movie review site, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate in Redfern the creation and use of a database of meta-information regarding query terms such as storing a list of movie titles, recognizing when a user enters a query term containing a movie title and taking a special action because such a modification would provide a database which is merely a collection of data stored on a computer storage medium such as a disk, that can be used for more than one purpose whether it is movie titles for searching the database or other information (meta-information (data information)).

With respect to claim 9, Redfern teaches storing and using information regarding the particular documents requested by a user in response to a query, remembering the most commonly requested document for a given query and presenting this document first in response to the same query in the future (col. 1, lines 21-65).

With respect to claim 10, Redfern teaches analyzing the number of documents found as a function of the number of third party search engines queried, and computing the estimated size of the document base which the third party search engines index is shown (col. 11, 55-67 and col. 16, lines 6-46).

With respect to claim 11, this dependent claim is rejected for the similar rationale given for claim 6.

With respect to claim 12, Redfern teaches detecting and displaying duplicate documents by identifying duplicate context strings (col. 3, lines 39-45 and col. 4, lines 29-34).

With respect to claim 13, Redfern did not explicitly teach, caching the full documents in order to improve access speed, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to cache the full documents to improve access speed because it is well known by skilled artisans that cache is a place where data can be stored to avoid having to read the data from a slower device such as a disk. Microprocessors have an internal instruction cache for program instructions that are being read in from RAM; an external cache is also used, consisting of RAM chips that are faster than those used in a computer's memory.

With respect to claim 14, Redfern teaches displaying suggested additional query terms for expanding the query based on terms in the documents identified in response to the query (col. 4, lines 35-43).

With respect to claim 15, Redfern teaches after all responses have been processed, further including the step of using a ranking scheme to re-rank documents according to the number of and proximity between query terms, and re-displaying the information regarding the documents according to the ranking (in col. 3, lines 3-16 and lines 32-45 and col. 4, lines 20-28).

With respect to claim 18, this dependent claim is rejected for the similar rationale given for claim 3.

With respect to claim 19, this dependent claim is rejected for the similar rationale given for claim 4.

With respect to claim 20, this dependent claim is rejected for the similar rationale given for claim 5.

With respect to dependent claim 21 this claim is rejected for the rationale given for claim 6.

With respect to dependent claim 22 this claim is rejected for the rationale given for claim 7.

With respect to dependent claim 23 this claim is rejected for the rationale given for claim 8.

With respect to dependent claim 24 this claim is rejected for the rationale given for claim 9.

With respect to dependent claim 25 this claim is rejected for the rationale given for claim 11.

With respect to dependent claim 26 this claim is rejected for the rationale given for claim 12.

With respect to dependent claim 27 this claim is rejected for the rationale given for claim 13.

With respect to dependent claim 28 this claim is rejected for the rationale given for claim 14.

With respect to dependent claim 29 this claim is rejected for the rationale given for claim 15.

With respect to claim 48, this dependent claim is rejected for the similar rationale given for claim 3.

With respect to claim 49, this dependent claim is rejected for the similar rationale given for claim 4.

With respect to claim 50, this dependent claim is rejected for the similar rationale given for claim 5.

With respect to claim 54, this dependent claim is rejected for the similar rationale given for claim 3.

With respect to claim 55, this dependent claim is rejected for the similar rationale given for claim 4.

With respect to claim 56, this dependent claim is rejected for the similar rationale given for claim 5.

With respect to independent claim 57 this claim is rejected for the rationale given
for claim 6.

With respect to claim 80, Redfern teaches the step of transforming the query
from the form of a question into the form of an answer prior to forwarding the query to
the plurality of third party search engines (col. 2, lines 21-27 and col. 15, lines 42-49).

With respect to claim 81, Redfern teaches the step of progressively displaying
includes displaying an indication of how close the query terms are to each other in the
documents (col. 10, lines 64-67 and col. 11, lines 1-10).

With respect to claim 82, Redfern teaches (a) displaying the information
regarding the documents and at least one context string for a predetermined number of
documents ranked using term proximity information (col. 8, lines 52-62); (b) displaying
the information regarding the documents and at least one context string for documents
that contain less than all the query terms (col. 15, lines 60-64); and (c) displaying the
information regarding the documents that contain none of the query terms (col. 16, lines
1-11). Redfern did not teach (d) displaying the information regarding the documents
and at least one context string for documents that contain duplicate context strings to
documents displayed earlier and (e) displaying the information regarding the documents
that could not be downloaded, but it would have been obvious to one having ordinary
skill in the art at the time the invention was made to display the information regarding
the documents and at least one context string for documents that contain duplicate
context strings to documents displayed earlier and display the information regarding the
documents that could not be downloaded and to modify in Redfern because such a

modification would allow Redfern to remove the duplicate context strings and to know which documents could not be downloaded and why they could not be downloaded.

With respect to claim 83, Redfern teaches the step displaying suggested additional query terms for expanding the query based on terms in the documents identified in response to the query (col. 5, lines 1-4).

With respect to claim 84, Redfern teaches the step of displaying summary information regarding the documents found and processed the summary information being separately identified for each search engine (col. 24, lines 31-66, col. 25, lines 1-67, col. 26, lines 1-16 and lines 17-67, and appendix g shows the search results for Excite; col. 27, lines 1-66, col. 28, lines 1-66, col. 29, lines 1-30 and lines 31-40, and col. 30, lines 1-39 shows the search results for Lycos).

With respect to claim 85, Redfern teaches (a) for n = 1 to MaximumPhraseLength, for each set of successive n words, if this combination of words has not already appeared in this document, then add the set (col. 1, lines 21-32); (b) for n = MaximumPharaseLength to 1, find the most common phrases of length n to a maximum of MaxN phrases which occurred more than MinN times, and add these phrases to the set of clusters (col. 4, lines 59-67 and col. 5, lines 5-23); (c) find the most common combination of two clusters from the previous step to a maximum of maxC combinations for which the combination occurred in individual documents at least minC times (col. 6, lines 16-60); (d) delete clusters which are identified by phrases which are subset of a phrase identifying another cluster (col. 10, lines 54-58); (e) merge clusters which contain identical documents (col. 10, lines 59-63 and col. 11, lines 11-30); and (f)

display each cluster along with at least one context string from a set of documents for both the query terms and the cluster terms (col. 15, lines 50-64). Redfern did not teach a hash table but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a hash table and to modify in Redfern because such a modification would allow Redfern to have a table of hash values that provides rapid access to data records with the hash function uniquely identifying each record with pointers to each record which is well known in the art.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Corey et al (US 5,987,446) discloses an information retrieval system, search engines, and ranking.

Teare et al (US 6,151,624) discloses a crawler, metadata, ranking algorithms, search engines, and HTML filtering.

Inquiries

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 703-308-7064. The examiner can normally be reached on **Monday-Thursday from 6:30 am -5:00 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703)746-7238 for After Final communications

Or: (703)746-7239 for Official communications

Or:

(703)746-7240 Non-Official communications.

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, Virginia, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group Receptionist whose telephone number is

(703)305-3900.

E. Colbert
April 20, 2002

JEAN M. CORRIELUS
PRIMARY EXAMINER